STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information
Center (STIC) detected errors when processing the following computer readable
form:

Application Serial Number: _10/593,119_

Source: _1FWP_

Date Processed by STIC: _9/28/06_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE
   APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A
   NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER
VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
> http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is
a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the
United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission
   User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
   Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/593,119

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1_____Wrapped Nucleics
Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2_____Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.

3_____Misaligned Amino Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4_____Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5_____Variable Length
Sequence(s)_____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6_____PatentIn 2.0 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7_____Skipped Sequences (OLD RULES)
Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8_____Skipped Sequences (NEW RULES)
Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9_____Use of n's or Xaa's (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10_____Invalid <213> Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)

11_____Use of <220>
Sequence(s) ___ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules

12_____PatentIn 2.0 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13_____Misuse of n/Xaa
"n" can only represent a single <u>nucleotide</u>; "Xaa" can only represent a single <u>amino acid</u>

AMC – STIC Systems Branch – 03/02/06

IFWP

RAW SEQUENCE LISTING   DATE: 09/28/2006
PATENT APPLICATION: US/10/593,119   TIME: 10:37:04

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09282006\J593119.raw

```
     4 <110> APPLICANT: Degussa AG
     6 <120> TITLE OF INVENTION: Novel alcohol dehydrogenases
     8 <130> FILE REFERENCE: S-IPM-PAT/Dr. Re-ko - K1419 EP
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/593,119
C--> 10 <141> CURRENT FILING DATE: 2006-09-18
    10 <160> NUMBER OF SEQ ID NOS: 68
    12 <170> SOFTWARE: PatentIn version 3.1
```

see item 4 on Err Summary Sheet

Does Not Comply Corrected Diskette Needed

ERRORED SEQUENCES

```
  2654 <210> SEQ ID NO: 68
  2656 <211> LENGTH: 1047
  2658 <212> TYPE: DNA
  2660 <213> ORGANISM: unknown
  2662 <220> FEATURE:
  2664 <221> NAME/KEY: source
  2665 <223> OTHER INFORMATION: ZF0050310= Arthrobacter paraffineus
  2667 <400> SEQUENCE: 68
  2668 atgaaggcaa tccagtacac gagaatcggc gcagaacccg aactcacgga gattcccaaa      60
  2670 cccgagcccg gtccaggtga agtgctcctg gaagtcaccg ctgccggcgt ctgccactcg     120
  2672 gacgacttca tcatgagcct gcccgaagag cagtacacct acggccttcc tctcacgctc     180
  2674 ggccacgaag gcgccggccg ggtcgccgcc gtcggcgagg gcgtcgaagg actcgacatc     240
  2676 ggaaccaatg tcgtcgtcta cggaccctgg ggctgtggca gctgttggca ctgctcgcaa     300
  2678 ggactcgaaa actactgttc tcgggcaaaa gaactcggca tcaatcctcc tggtctcggt     360
  2680 gcacccggcg cgttggccga attcatgatc gtcgattcac ctcgccacct cgtcccgatc     420
  2682 ggcgacctcg atccggtcaa gacggtgcca ctgaccgacg ccggtctgac tccgtatcac     480
  2684 gcgatcaagc gttcactgcc gaaacttcgc ggtggcgcgt acgccgtcgt catcggtacc     540
  2685 ggcggtctcg gccatgtcgc catccaactc ctccgccacc tctcggcagc aaccgtcatc     600
  2687 gcactcgacg tgagcgcgga caagctcgaa ctggcaacca aggtaggcgc tcacgaagtg     660
  2689 gtcctgtccg acaaggacgc ggccgagaac gtccgcagga tcaccggaag tcagggcgcc     720
  2691 gcactggttc tcgacttcgt cggctatcag cccaccatcg acaccgcgat ggctgtcgcc     780
  2693 ggcgtcggat cggacgtcac gatcgtcggg atcggcgacg gcaggcccca tgccaaagtc     840
  2695 gggttcttcc aaagtcctta cgaggcttct gtgacagttc cgtactgggg tgcccgcaac     900
  2697 gagctgatcg aattgatcga cctggcgcac gccggcatct tcgacatcgc ggtggagacc     960
  2699 ttcagtctcg acaacggcgc cgaagcgtat cgacgactgg ccgccggaac gctcagcggc    1020
B--> 2701 cgcgcggttg tggtccctgg tctgtag                                         1047 <- insert
```

see pp 2, 5

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/28/2006
PATENT APPLICATION: US/10/593,119   TIME: 10:37:05

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09282006\J593119.raw

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

```
Seq#:1;  Line(s)  26,27,33
Seq#:2;  Line(s)  97,98,104
Seq#:6;  Line(s)  323
Seq#:7;  Line(s)  374
Seq#:8;  Line(s)  425
Seq#:9;  Line(s)  476
Seq#:10; Line(s)  527
Seq#:11; Line(s)  578
Seq#:14; Line(s)  707
Seq#:15; Line(s)  760
Seq#:16; Line(s)  817
Seq#:17; Line(s)  881
Seq#:35; Line(s)  1670,1671,1677
Seq#:36; Line(s)  1714,1715,1721
Seq#:40; Line(s)  1857
Seq#:41; Line(s)  1894
Seq#:42; Line(s)  1929
Seq#:43; Line(s)  1966
Seq#:44; Line(s)  2002
Seq#:45; Line(s)  2039
Seq#:50; Line(s)  2197
Seq#:51; Line(s)  2238
```

VERIFICATION SUMMARY   DATE: 09/28/2006
PATENT APPLICATION: US/10/593,119   TIME: 10:37:05

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09282006\J593119.raw

```
L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:29 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:30 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:31 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:32 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:33 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:34 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:35 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:36 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:100 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:101 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:102 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:103 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:104 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:105 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:106 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:107 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:277 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:278 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:279 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:280 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:281 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:282 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:283 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:321 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:322 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:323 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:324 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:325 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:326 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:327 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:328 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:329 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:372 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:373 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:374 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:375 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:376 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:377 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:378 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:379 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:380 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:423 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:424 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:425 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:426 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:427 M:259 W: Allowed number of lines exceeded, <223> Other Information:
```

VERIFICATION SUMMARY   DATE: 09/28/2006
PATENT APPLICATION: US/10/593,119   TIME: 10:37:05

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09282006\J593119.raw

```
L:428 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:429 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:430 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:431 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:1562 M:283 W: Missing Blank Line separator, <220> field identifier
L:1725 M:283 W: Missing Blank Line separator, <400> field identifier
L:2701 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1047 SEQ:68
```

<210> 1

<211> 162

<212> PRT

<213> unknown

<220>

Per 1.823 of Sequence Rules, <223> response has a MAXIMUM of 4 lines. Please insert a <220> above every 5th line, and a <223> at beginning of every 5th line

<221> source
<223> ZF0002326= Actinoplanes missouriensis; ZF0003505= Streptomyces;
ZF0050197= Pseudomonas oleovorans; ZF0050294= Rhodococcus; ZF0050330= Bacillus;
ZF0051303= Bacterium; ZF0051337= Methylomonas; ZF0051321= Bacterium; ZF0050782=
Lactobacillus bulgaricus; ZF0050544= Phyllobacterium rubiacearum; ZF0002852=

<220> <223> Rhodococcus; ZF0050310= Arthrobacter paraffineus; ZF0002862= Streptomyces
clavuligerus; ZF0050292= Bacterium; ZF0002031= Streptomyces; ZF0002349=
Streptomyces spectabilis; ZF0002434= Streptomyces; ZF0002437= Streptomyces;

<220> <223> ZF0003712= Micromonospora; ZF0003765= Streptomyces; ZF0051305= Bacterium;
ZF0003513= Actinomyces; ZF0050993= Kocuria; ZF0002018= Streptomyces; ZF0003767=
Actinomyces; ZF0002332= Streptomyces diastatochromogenes; ZF0003768=
Actinomyces; ZF0002379= Streptomyces coelescens; ZF0002351= Nonomuraea
roseoviolacea; ZF0003769= Actinomyces;

<400> 1

The above is a sample of global errors.